Impact of Government Policy Index

Report for the Federation of Small Businesses

September 2017

Disclaimer

Authorship and acknowledgements

This report has been produced by Cebr, an independent economics and business research consultancy established in 1993. The report was authored by Cebr Senior Economist Kay Neufeld.

Cebr is the Centre for Economics and Business Research, an independent economics consultancy. Since its inception Cebr has provided analysis, forecasts and strategic advice to major multinationals, financial institutions, government departments, charities and trade bodies.

About FSB

As experts in business, FSB is a non-profit campaigning organisation for small businesses and the self-employed. Established over 40 years ago, FSB offers its members a wide range of vital business services, including advice, financial expertise, support and a powerful voice in Government. Its aim is to help smaller businesses achieve their ambitions.

London, September 2017

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Executive Summary

- FSB and Cebr have created a new index which tracks the costs and benefits for businesses arising from direct government policies in relation to taxation and government reliefs and incentives as applicable to smaller businesses.
- The Impact of Government Policy Index (IGPI) shows an increase of 12.5% between 2011 and 2016 (2016 data based on forecast), clearly ahead of the cumulative Consumer Prices Index (CPI) which stands at 7.7% for the same period.
- On a regional basis, government-driven business costs have risen most in London at 13.2%. Scotland and Wales remained close to the national average score with rises of 12.5% and 12.0%, respectively, while firms in Northern Ireland have seen a more modest increase in costs of 10.7%.
- Costs for SMEs have been consistently increased since 2011, with the exception of a temporary dip in 2015.
- At 34%, firms in the construction sector experienced the highest increase in government-driven business costs between 2011 and 2016. This sector was followed by arts, entertainment and recreation (23%) and other service activities (19%).
- Wholesale and retail trade was the only sector to see a decrease in government-driven business costs between 2011 and 2016, by 1%.
- Looking at the breakdown by business size, the results show that government-driven business costs increased by 18.1% for micro businesses, 11.4% for small businesses and 20.1% for medium-sized businesses. For VAT-registered sole traders, costs declined by 9.3%.
- The reduction in the main corporation tax rate benefitted most SMEs. Similarly, sole traders have enjoyed increases in the Personal Allowance and a reduction in the higher income tax rate from 50% to 45% in 2013.
- While the higher rate threshold has decreased by £3,000 since 2011, the Personal Allowance increased by slightly more (£3,525), which means that overall the income tax burden for sole traders has dropped slightly over time.
- Benefits including R&D relief, the Annual Investment Allowance and tax reclaims on pension contributions have reduced government-driven business costs for most companies.
- However, the variation in the AIA has made it difficult to plan ahead for companies who plan to make larger capital acquisitions. Furthermore, the recent reduction of the AIA limit from £500,000 to £200,000 caps the amount of capital expenditure firms can claim against their corporation tax. This is especially relevant for larger, capital intensive SMEs.
- Employment related policies have driven up costs significantly over recent years. Policies include the introduction of pension auto enrolment which has substantially impacted employers' pension contributions.
- Increases in the minimum wage and the introduction of the National Living Wage in 2015 have also added to employment costs, especially in the accommodation and food service activities sector.
- Business rates, Insurance Premium Tax and other duties and levies are further areas where the government has increased costs for businesses in recent years.
- While it is important to acknowledge the steps government has taken to decrease the tax burden for companies via a lower corporation tax rate (and higher Personal Allowance for sole traders), the IGPI shows that these reliefs cannot make up for cost increases in other areas.

Introduction

This newly created Impact of Government Policy Index enables users to track the costs businesses face due to direct government interventions. Factors such as changes in taxation, adjustments in reliefs and other government charges and benefits are tracked for each company by size. The index does not include costs that are largely determined by market forces such as the cost of raw materials or commercial rents. The cost of labour is captured only as far as it is shaped by government regulation, e.g. the minimum wage or pension contributions due to auto enrolment. We further excluded costs that are not directly related to the operation of a business, e.g. capital gains tax on the disposal of company shares. These indirect costs are difficult to track for a few reasons. Firstly, it is difficult to estimate how many businesses are impacted in a specific year. In the case of capital gains tax, for instance, it only applies when a business or shares are sold. Hence, it does not impact the vast majority of businesses in any given year. Secondly, it would be misleading to measure indirect costs of Government policy without accounting for indirect benefits of Government action, which are similarly difficult to measure. For example, infrastructure investment helps businesses in various ways but it is hard to isolate the exact businesses that benefit and even more difficult to quantify that benefit in pound terms.

The IGPI can be broken down by business size (VAT-registered sole trader, micro, small and medium enterprises), sector and currently covers the years 2011 to 2016. Since much of the available data we used only covered the period until 2015, we 'nowcast' some of the inputs to the index on the basis of CEBR's in-house economic models and changes in policy in 2016.

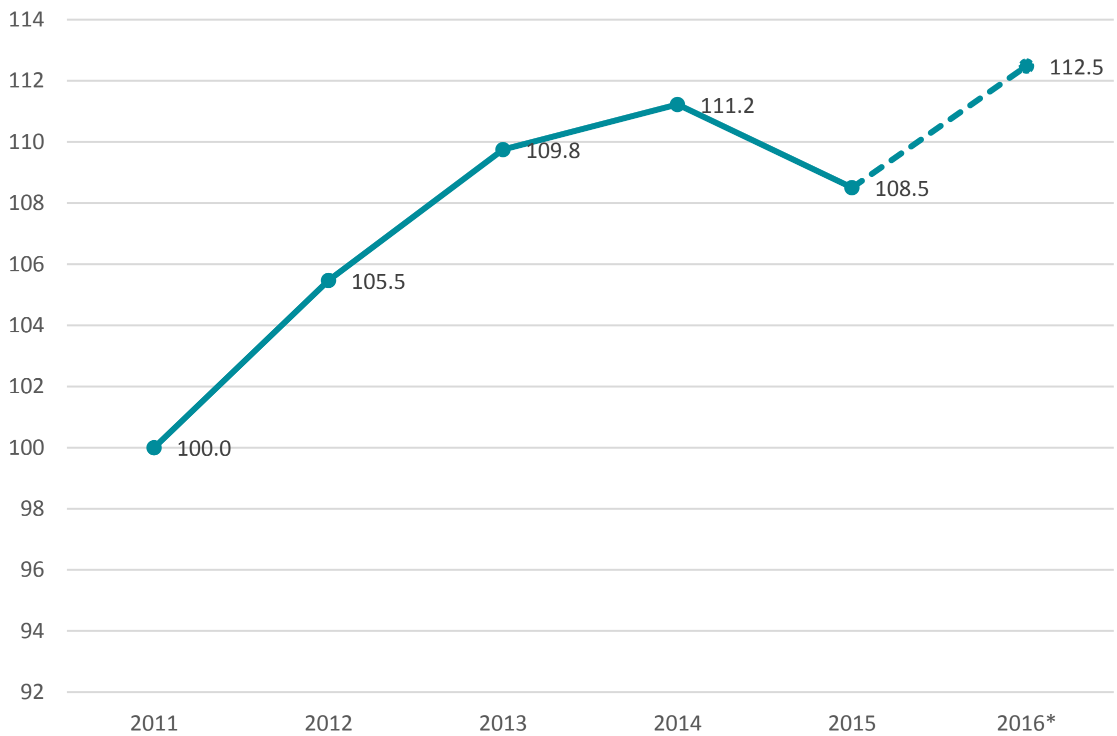
The aim of the index is to track and evaluate policy changes relating to VAT-registered sole traders and small and medium sized enterprises (SMEs), while also stimulating the debate about costs and the merits of various government interventions. CEBR and FSB also publish a quarterly Small Business Index, which measures operating costs for small businesses, such as the cost of labour, utilities, finance, and exchange rates. Many of these costs are not factored into the IGPI since they are not direct costs or benefits imposed by Government.

1 Headline Results

A look at the headline Impact of Government Policy Index for the UK shows that government-driven business costs for sole traders and SMEs have been consistently on the rise since 2011 with the exception of a dip in 2015. The index shows a 12.5% increase between 2011 and 2016*. For comparison, the CPI only rose by 7.7% over the same time frame.

The IGPI covers a large number of industries and various firm sizes, ranging from sole traders to medium-sized enterprises with up to 249 employees. There are a number of ways in which self-employed can operate in the UK. This index is limited to VAT-registered sole-traders, as a result of data limitations for the non-registered self-employed. This report looks behind the headline figures and explains the impact of government-driven costs on firms of different sizes and industries.

Figure 1: Impact of Government Policy Index – UK, 2011 = 100



Source: Cebr analysis
*2016 data partially forecasted

Section 1.1 will analyse the industry breakdown of the IGPI. This is done by looking at the nominal changes in government-driven business costs for each industry considered in the index as well as by exploring the respective contribution of each sector to the headline figure.

This chapter will be followed by section 1.2 which takes a closer look at the breakdown by firm size. In a similar manner to the industry breakdown, we can aggregate results for size classes to examine how government-driven business costs have changed between VAT-registered sole traders, micro, small and medium enterprises. As these results are weighted by the industry Gross Value Added (GVA) mix, they are representative of the size classes on a national basis.

Finally, the report explains which inputs make up the IGPI and how these individual drivers influence the overall results of the index. Chapter 3 concludes this report.

1.1 Analysing the industry breakdown of the IGPI

The Impact of Government Policy Index covers eleven key industries, which together account for over 70% of UK economic output in 2016. The industries and their respective share of total GVA in 2016 are shown in Table 1 below. Some other industries such as the financial services sector, public administration and defence and education had to be excluded due to issues with data availability. Crucially, a number of the index calculations rely on us having access to profit data or a proxy thereof. Where this data was not accessible, industries had to be excluded.

Given their respective weight within the economy, changes in costs in different industries have different impacts on the overall indicator. Real estate activities, wholesale and retail trade and manufacturing are the three largest sectors, each having a share of at least 10% of total value added in the economy. Accommodation and food service activities as well arts, entertainment and recreation and other service activities[1] are towards the bottom of the table when looking at their contributions.

Table 1 Industries covered in the Impact of Government Policy Index

Industry sector	Share of total GVA, 2016
Real estate activities	13%
Wholesale and retail trade; Repair of motor vehicles and motorcycles	11%
Manufacturing	10%
Professional, scientific and technical activities	8%
Information and communication	7%
Construction	6%
Administrative and support service activities	5%
Transportation and storage	5%
Accommodation and food service activities	3%
Other services activities	2%
Arts, entertainment and recreation	1%

Source: Cebr analysis

When looking at the contribution to the overall increase in the index between 2011 and 2016 on an industry level, it is worthwhile focussing on two aspects. Firstly, we want to measure how individual industries have performed over the six-year timeframe, measuring how government-driven costs in each industry changed between 2011 and 2016. Secondly, we will analyse how the contributions of individual

1 Other service activities (Sic Code S) includes: activities of membership organisations; repair of computer and household goods; other personal service activities including washing and dry cleaning, hairdressing, funeral activities and physical well-being activities.

industries to the headline index have varied, which depends not only on the nominal change in costs for each industry but also on the weight of each industry within the economy for each year.

Change in government-driven business costs by industry

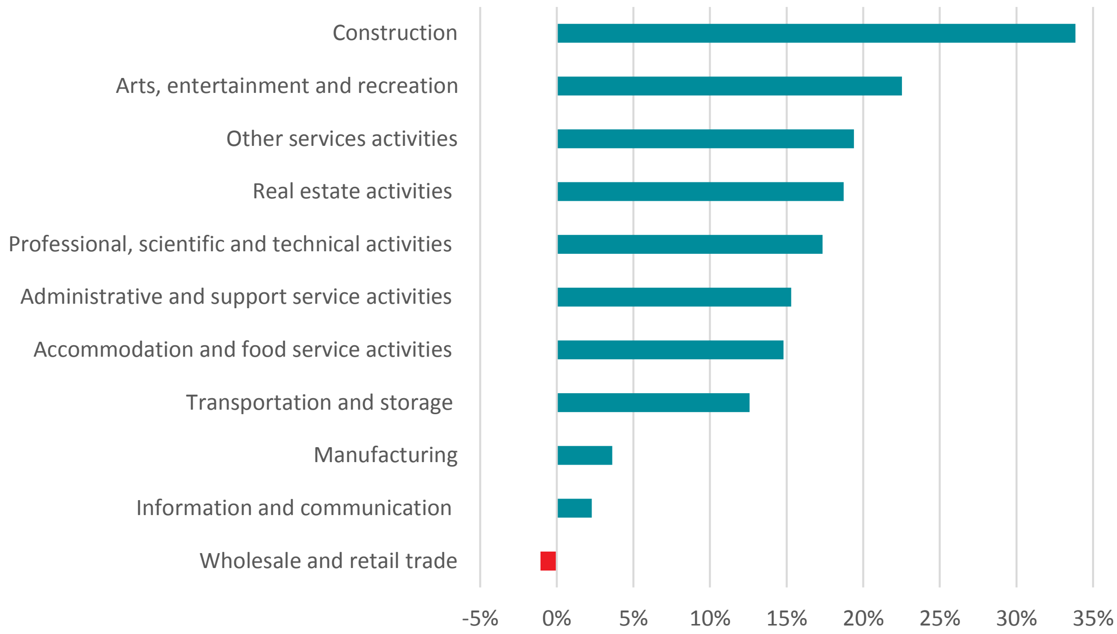
Looking at Figure 2, we see that the change in costs between 2011 and 2016 shows considerable range, from a decrease of 1% in wholesale and retail trade to an increase of 34% in construction.

The large increases in construction are down to a number of factors. As it is a very labour intensive industry, the introduction of pension auto enrolment was an especially important cost factor in the sector. But also NICs and corporation tax liabilities have increased consistently over the 2011-2016 period as the industry emerged from the crash following the financial crisis and set out on a path of growth and recovery. This led to a higher tax burden for most SMEs, which explains the variance of cost increases across the different business sizes: the cost increase for firms in construction was fairly equally spread among micro, small and medium sized enterprises, while VAT-registered sole traders saw only a 2.6% uptick.

Small businesses within the wholesale and retail trade sector saw a pronounced decline in government-driven business costs. This can be explained by a relatively steep fall in 'other duties and levies' for these companies between 2011 and 2013 which contains volatile components such as customs and excise duties, stamp duties and regulator fees. In particular, reductions in the hydrocarbon duty which came into effect in 2011 seem to have caused a significant cost reduction for small companies in subsequent years.

In the arts, entertainment and recreation sector, cost increases were mainly driven by small and micro enterprises as costs for VAT-registered sole traders actually decreased over the six year period. The large drop is due to a number of factors, which led to decreases in government-driven business costs across various industries. Sole traders benefitted from the increase in the Personal Allowance which led to a fall in the amount of income tax owed across industries. Fluctuations in the amount of business rates paid has led to further downward pressure on costs for a number of VAT-registered sole traders. Due to data limitations, medium sized enterprises are not considered in the arts, entertainment and recreation sector and the other services activities sector.

Figure 2 Change in government-driven business costs by industry, 2011-2016, in percent



Source: Cebr analysis

The real estate sector has seen costs rise by almost a fifth, largely driven by medium-sized enterprises. Again, due to data limitations VAT-registered sole traders had to be excluded for this sector.[2] Real estate activities sits alongside a large group of industries, spanning from other service activities to accommodation and food service activities, which have seen relatively similar increases in government-driven business costs of between 15% and 19% over the six-year timeframe.

Manufacturing, the third-largest industry sector in our list, saw government-driven business costs increase by less than 5%. Costs for medium-sized enterprises and VAT-registered sole traders fell over the time observed, while those for micro and small firms rose.

Government-driven business costs in information and communication increased only marginally between 2011 and 2016. The overall result, however, masks more volatile movements in the previous years. The index had increased by 9% in 2013 before falling back to 2.3% in 2016. Wholesale and retail trade is the only industry in which costs in 2016 decreased relative to 2011. The industry sub-index stands at 99 points, 1% below its start value in 2011. In the years between, costs in the industry have swung between modest positive and negative figures without showing much of a sustained trend.

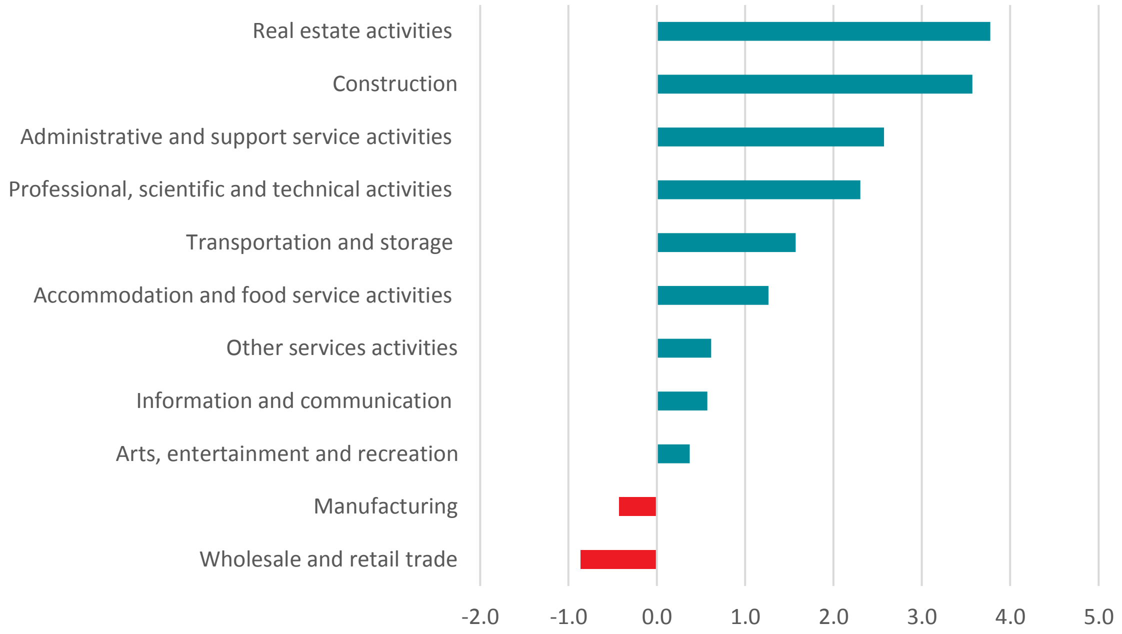
Contributions to the change in the headline index by industry

A second way to look at the results is to analyse how the different sectors contributed to the overall change in headline index. This analysis combines the change in government-driven business costs by industry as presented in the previous section with the respective weighting of each industry. For example, while the arts, entertainment and recreation sector has seen the second biggest increase, the sector plays a less prominent role in the overall index as its relative weight within the UK economy is much smaller than that of other sectors. To understand the movements behind the headline index, it is, therefore, necessary to look at both the changes within the sectors and their respective contributions to the overall index figure.

2 A complete list of industry firm-size combinations included to construct the IGPI can be found in the Annex.

When looking at Figure 3 we see that two of the largest industrial sectors actually acted as a drag on the 12.5 point change in the overall index figure. As we have seen above, costs in wholesale and retail trade actually declined over the 2011-2016 period explaining the negative contribution to the overall change in the headline rate. Manufacturing, however, also caused a 0.4 point reduction in the headline rate. Although costs have mildly increased in this sector between 2011 and 2016, this was not enough to offset the decline in its overall weight in the economy.

Figure 3: Contribution to change in headline rate, 2011-2016



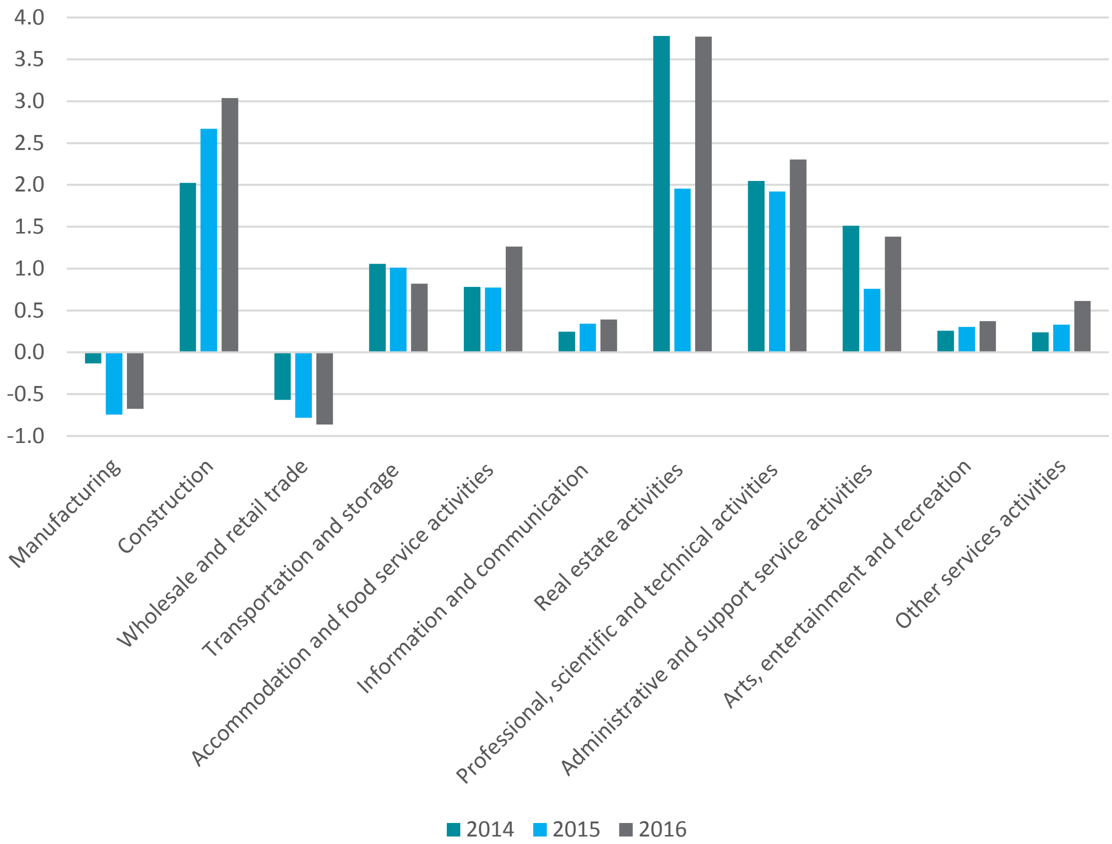
Source: Cebr analysis

According to the lower level aggregates of economic output produced by the Office for National Statistics (ONS), manufacturing's share of total GVA fell from 10.0% in 2011 to 9.7% in 2016. The lower GVA share of manufacturing means that its contribution to the overall headline figure falls as well. This effect was larger than the increase due to higher costs, which means the overall contribution in 2016 was lower than in 2011. Other industries expanded their share of the economy such as the real estate sector which increased its share from 12.1% to 12.9% between 2011 and 2016 thereby giving even more weight to the uptick in costs seen over these years. Likewise, accommodation and food service activities increased their weight, albeit from a lower base, from 2.5% in 2011 to 3.1% in 2016. The share of total GVA attributable to wholesale and retail trade has remained relatively stable over time and stood at 11.1% in 2016 (11.0% in 2011).

Explaining the 2015 dip

Figure 4 helps explain the fall in the headline rate seen in 2015. It breaks out the individual contributions of each industry for the three years from 2014 to 2016. It is clearly visible that the contributions of the real estate activities sector and administrative and support service activities experienced a sharp decline in 2015. Similarly, government-driven costs in manufacturing decreased in that year exerting a downward pressure on the headline figure, as did the contribution of wholesale and retail trade. In chapter 2 of the report we will look at the underlying drivers within industries and size group in more detail.

Figure 4: Contribution to change in headline rate, 2014, 2015 and 2016

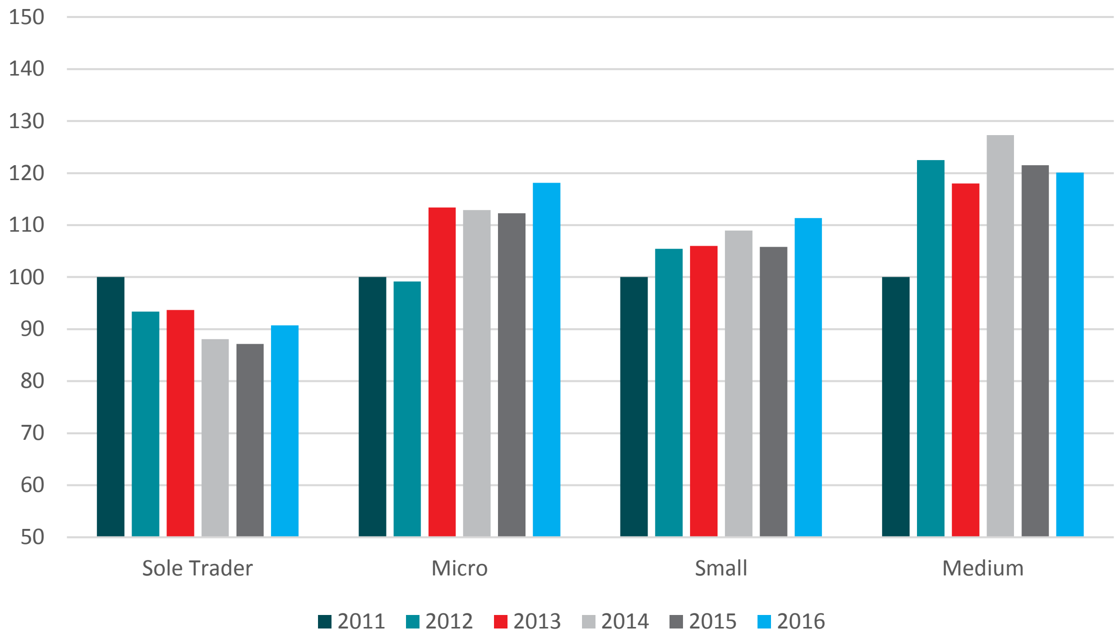


Source: Cebr analysis

1.2 Analysing the size breakdown of the IGPI

Having analysed the Impact of Government Policy Index by industry, we now turn to the breakdown by business size. Apart from the three common SME size breakdowns of micro (1-9 employees), small (10-49 employees) and medium enterprises (50 to 249 employees), we have further analysed the costs and benefits for VAT-registered sole traders. For all sizes, values are indexed at 100 in 2011.

Figure 5: Impact of Government Policy Index – broken down by business size, 2011 = 100



Source: Cebr analysis

As seen in Figure 5, VAT-registered sole traders have not seen the same increase as larger counterparts between 2011 and 2016. For micro businesses, government-driven business costs have risen considerably to a high of 118.1 in 2016. This is higher than all previous values in this size category and comes after costs had been trending down for the previous two years. For small enterprises, government-driven business costs have risen more moderately up to an index value of 108.9 in 2014. After a dip in 2015, costs again increased to 111.4 in 2016. Finally, medium-sized enterprises have seen the most volatility in the index. Costs rose dramatically between 2011 and 2012, jumping by over 20% to 122.5 points. From there, the index has had ups and downs with an absolute high point reached in 2014 at 127.3 before falling back to 120.1 in 2016. This makes medium sized enterprises the only ones to have experienced a cost reduction between 2015 and 2016.

1.3 Analysing national results

Apart from analysing the results of the index by business size and industry, we can also examine how government-driven costs for small businesses have changed across the nations and the capital of the UK. To that end, we analysed the industry make-up of the economies in Wales, Scotland, Northern Ireland and London. Table 2 shows how each region differs in terms of their industry mix based on GVA figures for 2016. We apply national sector weights from Table 2 to the raw IGPI results by industry to achieve the index scores for the nations and London. This means we can observe, what impact changes in taxation and regulation have on businesses in various parts of the country and how the structure of the national economies determine their exposure to changes in costs in certain industries.

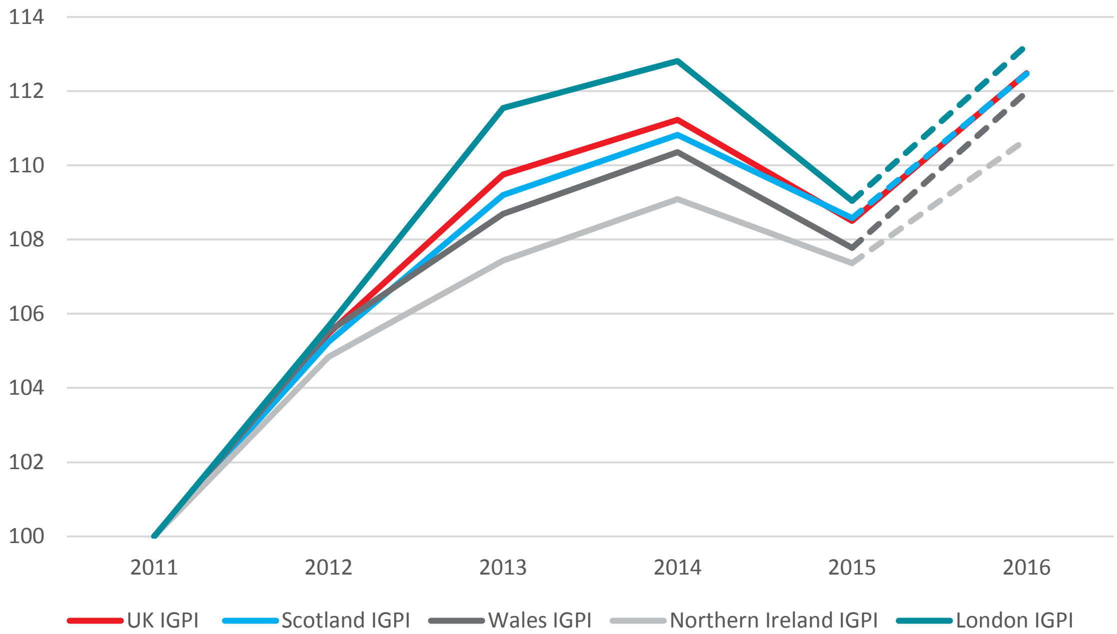
Table 2: Contribution of selected industries to total GVA by region

	Share of total GVA, 2016				
Industry sector	UK	London	Northern Ireland	Scotland	Wales
Manufacturing	10%	2%	15%	11%	16%
Construction	6%	4%	6%	6%	6%
Wholesale and retail trade; Repair of motor vehicles and motorcycles	11%	8%	14%	11%	10%
Transportation and storage	5%	5%	4%	4%	4%
Accommodation and food service activities	3%	3%	3%	3%	3%
Information and communication	7%	11%	3%	4%	3%
Real estate activities	13%	14%	8%	10%	13%
Professional, scientific and technical activities	8%	12%	4%	6%	4%
Administrative and support service activities	5%	6%	3%	4%	4%
Arts, entertainment and recreation	1%	2%	1%	2%	1%
Other services activities	2%	2%	2%	2%	2%

Source: ONS, Cebr analysis

For example, the real estate activities sector makes up 14% of London's economic output, compared to only around 8% in Northern Ireland. The strong increase in costs faced by firms in this sector therefore drives the movement in the London index to a greater extent than for Northern Ireland. In fact, the cost increases in the real estate activities sector explain why the London index ends up higher than any other in 2016 at 13.2% above its 2011 level, shown in Figure 6. Both Scotland and the overall UK IGPI stand at 12.5% above their 2011 levels, while Wales and Northern Ireland businesses have experienced slightly weaker cost pressures with 12.0% and 10.7% increases, respectively.

Figure 6: Impact of Government Policy Index, 2011-2016



Source: Cebr analysis
*2016 data partially forecasted

In Northern Ireland, almost 30% of output is generated in wholesale and retail trade and in manufacturing; two industries which have seen some of the more modest increases in cost pressures since 2011. In London, only 10% of output stems from these two sectors, while real estate and professional, scientific and technical activities play a much more prominent role than in the rest of the country. This explains most of the discrepancy between the IGPI for the capital and for Northern Ireland. Scotland industrial structure is fairly similar to the UK average, explaining the small difference between the UK and Scotland indexes. The real estate sector is more important in Wales than in most of the other areas (except for London), potentially driven by a large market for second homes. However, higher costs for the real estate industry are offset by rather mild increases in the manufacturing sector, which is the single largest contributor to GVA in Wales.

2 Detailed analysis of business cost drivers

This chapter goes into more detail about the inputs into the index and how these inputs drive business costs. Examples will help to explain changes in the IGPI and demonstrate how it can be used to evaluate direct government interventions.

The IGPI includes a range of taxes and government benefits. Based on a number of official data sources from HMRC and the ONS, we have modelled a profile for an average enterprise for every size and industry combination. For these 'model enterprises' we have then calculated the sum of costs and benefits arising from government intervention. The difference between costs and benefits provides the headline rate for the Impact of Government Policy Index.

2.1 Tax on profits and tax reliefs

Corporation and Income Tax

One of the most important taxes faced by SMEs is corporation tax. For businesses with profits under £300,000, the small profits rate stood at 20% between 2011 and 2016. The higher rate for businesses with profits above £300,000 was 26% in 2011 but was gradually lowered to 20% in 2015, thereby eliminating the difference between the main rate and small profits rate. Prior to 2015, businesses with profits between £300,000 and £1.5 million were further entitled to claim a marginal relief on their corporation tax bill, which has been gradually phased out as the main rate was lowered to its current level.

Given the decrease in the tax rate, the contribution of corporation tax on the IGPI has generally been falling. Medium-sized enterprises in manufacturing are a good example of this. With profits net of benefits largely stable between 2011 and 2016, manufacturers have seen their tax bill decrease by more than a fifth as a result of the lower main rate. This has kept overall government-driven costs down, despite rising Insurance Premium Tax payments and pension auto enrolment obligations.

For sole traders, the equivalent of corporation tax is income tax. Typically, sole traders will use a self-assessment tax return to declare the income generated from their business and their resulting tax liabilities. Sole traders (and other income tax payers) are entitled to a Personal Allowance which is deducted from taxable income. The Personal Allowance has increased steadily in the UK from £7,475 in 2011 to £11,000 in 2016.[3] Any income above the Personal Allowance and below the higher rate threshold is taxed at the basic rate which has remained unchanged at 20% between 2011 and 2016. A further threshold is set at £150,000 - any income above this threshold (after deducting the Personal Allowance) is taxed at the additional rate. This additional rate was reduced from 50% in 2012 to 45% in 2013 and has since remained unchanged. Unlike the additional rate threshold, the higher rate threshold has changed over the period analysed. In fact the threshold has decreased from £35,000 in 2011 to £32,000 in 2016. However, as the Personal Allowance increased simultaneously and by slightly more than the higher rate threshold decrease, sole traders paid slightly less income tax in 2016 than in 2011.

The following paragraphs will explain some of the tax reliefs considered in the IGPI. Generally speaking, most reliefs from the government side have become more generous over time. This, however, does not hold for the Annual Investment Allowance, which has varied substantially between 2011 and 2016. As

3 See https://www.gov.uk/capital-allowances/annual-investment-allowance

the sum of reliefs firms claim increases, their taxable profits decrease all else held equal. In turn, this lowers the corporation tax bill which means that we'd expect the IGPI to decrease.

However, apart from the various reliefs, the final corporation tax burden depends of course upon the profits which serves as the base for any tax calculation. While there was considerable variation across industries and firm sizes, profits have generally trended upwards thereby incurring a higher corporation tax bill.

R&D tax relief

The tax relief for research and development expenditure is one of the tax reliefs deducted from gross operating profits before corporation tax is calculated. This means that the R&D tax relief effectively lowers the tax burden enterprises have to pay. HMRC publishes data on R&D claimed by industry which helps us to allocate the relief across our 'model-enterprises'. The R&D tax credit is calculated at a rate of 130%, meaning that for every eligible pound spend on R&D activities, £1.30 can be deducted from taxable profits.[4] As larger firms usually spend more on R&D the relief is more of a relevant factor for medium-sized firms. VAT-registered sole traders cannot claim R&D tax relief.

Annual Investment Allowance

The Annual Investment Allowance (AIA) is another benefit firms can claim to reduce their corporation tax liabilities. AIA can be claimed on most plant and machinery (including hardware and software licenses) with the exception of cars.[5] The amount of AIA that can be claimed has varied significantly over the years. It stood as low as £25,000 in the April-December 2012 period before rising to £250,000 in January 2013 and again to £500,000 in April 2014. In January 2016 it decreased to £200,000 – the level at which it currently stands. The decrease in the AIA therefore works as a cost driver in the IGPI between 2015 and 2016. HMRC publishes data on the cost of the AIA to the taxpayer, which gives us an approximate idea of the uptake of the AIA. We used data on net capital acquisitions by firm size and industry, retrieved from the Annual Business Survey, to allocate AIA amounts across our model enterprises. AIA amounts are taken from HMRC accounts which keep track of the cost of various tax reliefs. Accordingly, larger firms benefit more from the AIA relief than smaller firms which typically spend less on capital acquisitions. Similarly, capital intensive industries like manufacturing or construction are also better placed to make use of this government relief than, for example, companies in professional services. As the cap for the AIA varies drastically over the period examined, so does the actual relief that firms claim. For example, our model suggest that medium-sized manufacturing firms claimed between £15,500 in 2012 and £45,300 in 2014. In 2016, the amount of AIA claimed by the typical medium sized manufacturing firm stood at £32,000.

Employer pension contributions

Employer pension contributions can be claimed against corporation tax. To do so, businesses need to claim employer pension contributions as an expense in calculating the profits of the business or trade. In other words, pension contributions can reduce taxable profits for an employer. To work out the average pension contributions for each of our model enterprises we used data on gross wages and salaries from the Annual Business Survey. Based on the typical wage bill for each company we calculated pension

4 See https://www.gov.uk/guidance/corporation-tax-research-and-development-tax-relief-for-small-and-medium-sized-enterprises
5 See https://www.gov.uk/capital-allowances/annual-investment-allowance

contributions based on the share of companies estimated to offer workplace pensions and the median workplace pension contribution rates, published by the ONS.[6]

Our considerations regarding pensions take into account the introduction of auto enrolment. In an attempt to increase pension savings, the government has rolled out auto enrolment over the last 5 years, obliging employers to enrol employees into a workplace pension scheme if they earn more than £10,000 per annum and are aged between 22 and the state pension age. Employees then have to actively opt-out if they do not want to pay into a pension scheme. By 2014, all medium-sized enterprises had to offer workplace pensions, with later dates for small and micro enterprises. This has led to a substantial increase in the share of employees enrolled in workplace pension schemes. At the same time, median contribution rates have dropped from 8% in 2011 to 6.4% in 2014 for micro firms and from 6% to 5% for medium-sized firms as a large number of workers joined pension schemes on the minimum required contribution rate, which was as low as 1% of qualifying earnings. As more and more companies had to comply with auto enrolment in the years since, we expect that median contribution rates have fallen further. Both the gradual roll-out of auto enrolment and the change in median contribution rates are taken into account in our estimation of average pension obligations for each model enterprise.

Pension contributions are related to the total wage bill of a firm. Generally speaking, larger firms and high-wage industries will therefore have higher pension contributions. Across all sizes and industries, pension contributions have generally increased as a function of the roll out of auto enrolment and higher wage bills. The tax relief on pension contributions therefore exerts downward pressure on the IGPI, while pension auto enrolment has generally produced a larger relative increase in costs.

2.2 Employee-related costs

National Insurance Contributions

National Insurance Contributions (NICs) are part of the social security payments employers have to make for their employees. For most employees earning above a certain threshold, employers have to pay 13.8% of their employees' gross wage bill towards NICs. Exceptions exist for apprentices under 25 and employees under 21.[7] As of April 2014 employers can deduct the Employment Allowance, which is up to £2,000 a year. The Employment Allowance was increased to £3,000 in April 2016.

For sole traders, NICs are calculated differently. Those with profits below a certain threshold pay a low flat rate per week (Class 2 NICs). From April 2018 onwards, Class 2 NICs will be abolished and all sole traders will only be required to pay Class 4 contributions, subject to the small profits threshold. In case sole traders exceed a certain upper profit they are charged an additional contribution rate.[8]

Similar to employer pension contribution, NICs are a more important cost factor for large companies and those with a high wage bill. As the main NICs rate has been left unchanged over the 2011-2016 period the variations in the cost are due to changes in the gross wage bill of companies.

Minimum wage

Employers in the UK are obliged to pay their staff at least minimum wage rates. These rates have been adjusted every year for the period observed. While the minimum wage rates are age specific (older

6 See https://www.ons.gov.uk/peoplepopulationandcommunity/personalandhouseholdfinances/pensionssavingsandinvestments/bulletins/occupationalpensionschemessurvey/2015
7 See https://www.gov.uk/national-insurance-rates-letters/contribution-rates
8 https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/625243/Table-a4.pdf

workers are entitled to higher wages) we have focussed on the main rate for workers age 21 and over (until 2015) and 25 and over (from 2016 onwards).

Measuring the cost of the minimum wage (or National Living Wage, as the rate is called since 2016) is complex as both market forces and government intervention are at play. Nevertheless, especially for SME employers the minimum wage and NLW is a significant cost factor which needs to be considered. Data from the Annual Survey of Hours and Earnings show us a wage distribution by industry, which means we can estimate how many employees in each industry are paid below minimum wage rates. We further assume that this is a good approximation for the number of employees for which the minimum wage is a binding constraint. The cost of the policy is then given by the difference in the minimum wage between year 'n' and 'n-1' multiplied by the number of people affected in each industry. The cost of a minimum wage therefore consists of the amount by which the government raises the rates and the share of affected employees. The latter ranges from 0% for many industries where employers pay at or above minimum wage rates, to 10% in administration and support service activities, arts, entertainment and recreation, other services activities, and wholesale and retail trade, to as much as 40% for accommodation and food service activities. The cost was highest in 2016 when the NLW came into effect at £0.50 above the previous minimum wage rate. For comparison, the minimum wage was lifted by £0.20 or less in all of the previous five years.

Auto enrolment

As described previously, the government requires firms to enrol most of their employees into workplace pension schemes. To identify the cost this presents to employers, we use a counter-factual scenario in which auto enrolment was not introduced. The cost arising is therefore the difference in pensions contributions in each year compared to the case in which enrolment rates remained at 2011 levels. This cost adds up over the years as auto enrolment is rolled out to an increasingly large share of employers who would have otherwise not participated in workplace pension schemes. In terms of the cost burden, our model shows that the cost of auto enrolment stands at below the cost of NICs but above minimum wages costs. By definition, VAT-registered sole traders are excluded from minimum wage and auto enrolment cost calculations.

2.3 Other levies and indirect taxes

Insurance Premium Tax

Insurance Premium Tax (IPT) is a tax levied on insurance premiums in the UK.[9] The tax is to be paid by insurers but in practice the economic incidence of the tax lies almost completely with the insurance holder. It is therefore considered an indirect tax as insurers are able to fully pass on the cost of the tax to their clients. The Annual Business Survey also holds data about the amount of commercial insurance premiums paid by businesses. We use this data, which is stratified by industry and business size as the basis for our calculation of the tax burden. There are two rates of IPT, a standard rate and a higher rate. Both rates have been subject to change a number of times between 2011 and 2016. Looking specifically at the standard rate, it increased from 6% to 9.5% in November 2015 then rose to 10% in October 2016 only to increase further to 12% in June 2017. We assume that the standard rate applies to all insurance taken out by businesses. Our calculation therefore multiplies the amount paid in insurance premiums by

9 See https://www.gov.uk/government/publications/rates-and-allowances-insurance-premium-tax/insurance-premium-tax-rates

the standard rate for the respective year to yield the share of these premiums that can be attributed to the IPT.

National non-domestic rates (business rates)

Business rates are a tax based on the rateable value of a commercial property. The rateable value is based on open market rental values. Data on business rates are taken from the ONS' Annual Business Survey, which asks businesses to declare the amount they have paid in non-domestic rates. Based on this, we can assume that any relief regarding business rates is already reflected in the self-assessment.

Business rates are a significant cost factor for businesses of all sizes and in most industries, but policy and systems vary across all four nations, as do the reliefs and exemptions available to non-domestic ratepayers, so it is difficult to assess the impact of rates costs across all of the nations.

Non-domestic properties were revalued in England and Wales in April 2017, based on rateable values from April 2015. This was the first review of rates in England and Wales since 2010 (based on values of 2008), which means that business rates considered in the period 2011-2016 for these nations are based on this previous review. If a business' rateable value is below £15,000 it might be eligible for small business relief. The volatility in business rates can therefore have an important impact on the indicator as a whole. For example, the business rate obligations for the average small firm in the transportation and storage sector have increased steadily from around £27,000 in 2011 to £44,500 in 2016, contributing to the overall increase in government-driven business costs for firms in this size category and sector.

Other duties and levies

Finally, we aggregate further rates, duties and levies that business need to pay under a common input. The data are taken again from the Annual Business Survey. Other duties and levies include vehicle excise duty, climate change levy, HMRC duties included in turnover figures and other amounts paid for through rates, duties, levies and taxes. Due to the diverse nature of the various duties included, payments can vary significantly between years and across industries and firm sizes. This pattern explains some of the cost reductions seen in the wholesale and retail trade sector.

A further explanation is that the data show sizeable shifts in the tax burden between medium-sized and large firms, which do not form part of the index. For example, medium-sized firms in the wholesale sector in 2012 paid £14.9 billion in 'other amounts and duties' compared with £10.1 billion for large firms. In 2015, medium sized firms in the sector only paid £9.3 billion while large firms paid substantially more at around £15.9 billion.

The amount due for other duties and levies for small firms, on the other hand, decreased by 50% from 2011 to 2015, leading to substantial reductions in costs. The spike in 2011 costs for small businesses could be due to a number of factors including a rise in excise duties [10] which would have hit retailers if they didn't pass on the increase in cost immediately to consumers.

10 See https://www.ifs.org.uk/uploads/gb/gb2016/gb2016ch9.pdf

3 Conclusion

The Impact of Government Policy Index is a representative measure of government-driven business costs faced by SMEs and VAT-registered sole traders in the UK. The IGPI spans 11 industries, accounts for businesses of various sizes and covers over 70% of economic output in the UK. It shows that various government policies are adding to the cost pressures for firms across almost all sizes and industries.

In terms of firm sizes, VAT-registered sole traders have not seen the same increase as larger counterparts while medium-sized companies and micro enterprises have seen the largest increase in government-driven business costs. When we aggregate industries, wholesale and retail trade emerges as the only sector for which costs are lower in 2016 than they were in 2011. The fall in costs in mainly driven by an unusually large drop in 'other duties and levies', which decreased by 70% between 2011 and 2015. The sector also experienced and increase in the tax relief on pension contributions, though this was more than offset by the cost of higher pension obligations due to auto enrolment.

The construction sector has seen the strongest increases in government-driven business costs compared to 2011, with costs being 34% higher. This is followed by arts, entertainment and recreation which has seen a 23% increase, and other service activities with a 19% increase.

Beyond the firm size or industry level, the IGPI also allows for a more nuanced examination of underlying cost drivers. The analysis has shown that a number of tax reliefs have reduced the corporation and income tax burden for many firms and VAT-registered sole traders. The many changes in the AIA, however, make it difficult for firms to reliably plan ahead when it comes to investment decisions. The decrease in the main corporation tax rate between 2011 and 2015 has provided some welcome relief for SMEs. For sole traders, however, the increase in the Personal Allowance was accompanied by a decrease in the higher rate threshold, resulting in many paying the higher tax rate. This effect will be somewhat mitigated in the coming tax year as the higher rate threshold increases by £1,500 to £33,500.

Employment related costs have been on an upwards trend since 2011, mainly driven by minimum wage increases and auto enrolment. Increases in the minimum wage and the introduction of the National Living Wage in 2016 had an especially large impact on businesses in the accommodation and food services sector which employ a larger share of people at or below minimum wage rates.

NICs are a further substantial cost factor for SMEs, although the main rate employer contribution for most has remained stable over the period analysed.

That fact that business rates have a significant impact on SMEs is confirmed every time a rate review takes place, as those hit hardest by a change in rateable values are often pushed to the limits of or even beyond their break-even point. Though rental values are upgraded each year in line with inflation, the lengthy period between revaluations can result in large changes in business rate bills, which increases uncertainty among business owners. Looking at indirect taxes, businesses' Insurance Premium Tax bill has grown steadily over the years observed, putting further upward pressure on the IGPI. This is only partly due to businesses taking out more insurance policies. The IPT rate has risen twice since 2015, from 6% to 10% currently. As insurers can pass this cost on easily, policyholders are the ones who have to grapple with the tax hike.

All in all, the Impact of Government Policy Index paints a comprehensive picture of the costs and benefits associated with government interventions for SMEs. From minimum wages to Insurance Premium Tax and the Personal Allowance, the field of taxes, regulations and levies can be complicated to navigate. This index should be seen as a tool to support decision makers in assessing the impact of previous tax and policy changes in order to inform an evidence-based debate about the costs and merits of government intervention on small businesses.

4 Contact

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5 Annex

Table 3 Matrix of industry and firm sizes included to construct the index

SIC Code	Industry	Sole Trader	Micro (1-9 employees)	Small (10-49 employees)	Medium (50-249 employees)
C	Manufacturing	✓	✓	✓	✓
F	Construction	✓	✓	✓	✓
G	Wholesale and retail trade	✓	✓	✓	✓
H	Transportation and storage	✓	✓	✓	✓
I	Accommodation and food services	✓	✓	✓	✓
J	Information and communication	✓	✓	✓	✓
L	Real estate activities	✗	✓	✓	✓
M	Professional, scientific and technical activities	✓	✓	✓	✓
N	Administrative and support service activities	✓	✓	✓	✓
R	Arts, entertainment and recreation	✓	✓	✓	✗
S	Other services activities	✓	✓	✓	✗